

FRAME HOUSES SAFEST FROM TORNADOES

Brick and tile buildings are more susceptible to damage in tornadoes and cyclones than well built frame structures, Prof. C. C. Williams, head of the department of civil engineering at the University of Illinois, has learned, following a series of investigations.

Rooms of large size without the support of substantial interior walls are most readily collapsed in wind storms, he reports. Such large shell-like rooms to be safest from wind destruction should be located on the north and east sides of buildings. A structure, in order to withstand storms, should have resistance to torsion and should be made of material having high tensile strength.

In a report of his investigations he concludes:

"Frame and stucco dwellings with masonry basements may be built to sustain tornadoes at an additional cost of a small fraction of one per cent.

"Properly designed structures of brick, concrete, or steel may be expected to withstand terrific wind.

"Brick walls as ordinarily constructed are not stable against tornadoes because of their lack of tensile strength. The prevailing practice in the construction of brick buildings is not adequate to withstand severe storms.

"Large rooms in brick buildings should have steel roof trusses carried on independent steel columns.

"Corridors in school buildings should be built with solid construction walls up through the building and certain transverse walls should be made continuous as bracing for the building. Comparatively small square rooms with strong construction carried up through the building would act as "towers of strength" against such a storm.

"Reinforced concrete chimneys and bins ordinarily withstand tornadoes.

INDUSTRIES COOPERATE IN GOVERNMENT RESEARCH

Sixty-one research scientists, representing 36 organizations most of which are national in scope, are at work at the U. S. Bureau of Standards, helping to solve industrial problems.

The purpose of this cooperation, according to Dr. George K. Burgess, director of that bureau, is to make well-equipped laboratories available for the mutual benefit of government and governed, to bind the bureau and industry more closely together, to encourage the application of science to industry, and to add government prestige to research results.

This is a further development of the purpose for which the Bureau of Standards was created by Congress, Dr. Burgess said. Cooperation between industry and